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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,128	06/11/2001	Sang Seok Lee	049128-5010	2063
9629	7590	07/20/2004	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			KENNEDY, JENNIFER M	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,128

Applicant(s)

LEE, SANG SEOK

Examiner

Jennifer M. Kennedy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

In view of Applicant's amendment to the claims, the objections to claims 1, 5 and 10 are withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner notes that the limitation that "the protrusion being formed with a same material as that deposited for forming LCD cell structures on the two plates" is not before mention the specification or the original claims. The examiner cannot find material choices for the other LCD cell structures other than that of the protrusion, nor is there any recitation that the material for forming the protrusion is the same as that of any other LCD cell structure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Von Gutfeld (U.S. Patent No. 6,219,126).

In re claim 1, Von Gutfeld discloses a liquid crystal display device, comprising:
two plates (1a, 1b), one plate (1a) of the two plates having a protrusion (3) thereon for defining a picture displaying area (area interior of protrusion, filled with liquid crystal);

a sealant (2b, see column 4, lines 10-20) formed along edges of the other plate (1b) of the two plates, a position of the sealant being outside of the protrusion (see Figure 1 and 2);

a liquid crystal evenly dispersed into the picture displaying area such that the protrusion completely contains the liquid crystal material in the picture displaying area (see column 4, lines 2-5, see Figure 2).

The examiner notes that Figure 2 shows that the liquid crystal is evenly dispersed in the picture displaying area. Further, the examiner notes that the liquid

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crystal material is a liquid and, therefore, it would fill the total volume that it is contained by equally.

The examiner notes that liquid crystals allow for a picture to be displayed. The protrusion defines the area in which the liquid crystal is confined and, therefore, defines the picture display area.

In re claim 4, Von Gutfeld discloses the device wherein the liquid crystal is dispersed using a liquid crystal dispensing method (see column 4, lines 2-10). The examiner notes that claim 4 is a product-by-process claim. “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). See MPEP 2113. Further, the examiner notes that any dispensing method that dispenses liquid crystal could be considered a liquid crystal dispensing method.

In re claim 8, Von Gutfeld further discloses the device wherein the protrusion is formed from any one of metal, indium-tin-oxide and organic insulating film (see column 5, lines 20-30). The examiner notes that silicone rubber is an organic insulating film.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Von Gutfeld (U.S. Patent No. 6,219,126) in view of Ishihara et al. (U.S. Patent No. 5,263,888).

Von Gutfeld discloses the method of fabricating a liquid crystal display device comprising the steps of:

providing an two plates (1a, 1b) , one plate (1a) of the two plates having a protrusion (3) thereon for defining a picture display area (area interior of protrusion, filled with liquid crystal);

forming the sealant (2b, see column 4, lines 10-20) on the other one (1b)of the two plates, a position of the sealant being outside of the protrusion (see Figures 1 and 2);

forming a liquid crystal layer (see column 4, lines 2-5) onto the picture display area; and

joining the two plates (see column 4, lines 20-25, and Figure 2).

The examiner notes that liquid crystals allow for a picture to be displayed. The protrusion defines the area in which the liquid crystal is confined and, therefore, defines the picture display area.

Von Gutfeld does not explicitly disclose the method of dispensing the liquid crystal on the picture display area evenly by a liquid crystal dispensing method, but does disclose that one would want to dispense of it by the method of Ishihara et al. (U.S. Patent No. 5,263,88). Ishihara discloses the method of dispensing the liquid crystal evenly by a liquid crystal dispensing method (see item 2 of Figure 3(a), and column 4, lines 25-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to since Von Gutfeld expressly states this method could be used and because the method of Ishihara ensures that maximum uniformity is achieved for the gap between the substrates and allows for a high-quality display panel (see column 3, lines 40-50).

In re claim 9, Von Gutfeld discloses the method wherein the protrusion is formed from any one of metal, indium-tin-oxide and organic insulating film (see column 5, lines 20-30). The examiner notes that silicone rubber is an organic insulating film.

In re claim 10, Von Gutfeld discloses the method wherein the liquid crystal remains completely contained in the picture display area during the step of joining the two plates (see column 4, lines 30-65 and Figures 1 and 2).

Response to Arguments

Applicant's arguments with respect to claims 1, 4-5 and 8-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer M. Kennedy whose telephone number is (571) 272-1672. The examiner can normally be reached on Mon.-Fri. 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


jmk


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